



BARBARA WARD, LADY JACKSON, was awarded the honorary degree of Doctor of Laws at Fall Convocation, Saturday, November 4. In the evening, Lady Jackson, a woman of world renown in the fields of international affairs, economics, and religion, addressed the new University Public Forum lecture series (above). If demand warrants it, the Public Relations Office, in co-operation with radio station CKUA, will make her address available as a record, at about \$4.00. For details, telephone local 4201.

883 admitted to degrees at Fall Convocation

Degrees in course were conferred upon 883 students of The University of Alberta at Fall Convocation. Degrees were granted as follows: Doctor of Philosophy, 54; Master of Arts, 64; Master of Science, 74; Master of Education, 38; Master of Business Administration, 3; Bachelor of Divinity, 3; Bachelor of Arts, 97 (Honors, 2); Bachelor of Music, 1; Bachelor of Science, 53; Bachelor of Education, 386; Bachelor of Education (Industrial Arts), 2; Bachelor of Education (Vocational Education), 32; Bachelor of Science in Agriculture, 2; Bachelor of

Commerce, 19; Bachelor of Science in Engineering, 7; Bachelor of Science in Pharmacy, 8; Bachelor of Science (Pharmaceutical Administration), 1; Bachelor of Physical Education, 15; Bachelor of Science in Nursing, 18; Diploma in Public Health Nursing, 2; Dental Hygiene Diploma, 1; Bachelor of Science in Household Economics, 3.

The text of the President's *Report to Convocation* is enclosed with this issue of FOLIO.

Staff news

NEW BOOKS

Dr. E. Otto Hohn's book, *Hormones in Men and Animals*, has been published by the English Universities Press Ltd., in its *Teach Yourself* series. The book considers hormone action in normal individuals, man and animals, and serves as an introduction to endocrinology for readers of diverse backgrounds and interests.

Public Finance and Economic Development of Natal, 1893 to 1910 by Zbigniew A. Konaczacki, Associate Professor of Economics, was published by Duke University in October. This is the first published work to deal specifically with the public finance and general economic development of that country for this period.

The Elizabethan Court of Chancery, by W. J. Jones, Associate Professor of History, has been published by the Clarendon Press, Oxford. The book is a study of the Chancery as a law court at the time when both its officials and procedures were subjected to a process of definition. The book deals with the men who staff the court and the problems they face, and the growth of procedural rules within the court. It attempts to describe the status of Chancery and its position vis-à-vis other courts at the end of the Elizabethan period.

DEATH

Dr. Robert Graham Huckell, Professor and Head of the Division of Orthopaedic Surgery from 1948 to 1958, died on October 11. Dr. Huckell's first appointment to the Division was in 1931, as Instructor. The Canadian Orthopaedic Jewel was presented to him by Queen Elizabeth in 1952 for his work as President of the Canadian Orthopaedic Association.

RECEIVE GEOLOGICAL RESEARCH GRANTS

A total of \$20,020 in research grants have been awarded University staff members by the Geological Survey of Canada. Recipients from the Department of Geology were: Dr. H. A. K. Charlesworth, Associate Professor, \$3,360; Miss Jane Colwell, Museum Preparator, \$3,160; Dr. R. D. Morton, Associate Professor, \$3,000; and \$1,760 to Dr. R. C. Fox, Assistant Professor; Dr. D. G. W. Smith, Assistant Professor; Dr. C. R. Stelck, Professor; and Dr. G. D. Williams, Associate Professor.

Grants were also made to Dr. D. L. Jones, Assistant Professor of Physics, \$1,700; and Dr. D. Rankin, Assistant Professor of Geophysics, \$1,760.

PAPERS PRESENTED

Dr. B. R. Bociurkiw, Professor of Political Science, presented a paper on "Concepts of Church-State Relations in the USSR" at an international conference on "Trends in the Changing Society: Religious and Intellectual Ferment in the USSR." The conference

was held at the Centre de Recherches et d'Etude des Institutions Religieuses at Geneva, Switzerland, in September. Earlier, Dr. Bociurkiw gave a public lecture on "Problems of Research on Soviet Church Policy" at the Ukrainian Catholic University of St. Clement in Rome.

Dr. D. D. Betts, Professor of Physics, toured southwestern Ontario universities as Visiting Lecturer of the Canadian Association of Physicists. He spoke on "Critical Phenomena—the Physics of Large Scale and Long-lasting Atomic Misbehavior" at McMaster University, Brock University, University of Windsor, University of Western Ontario and University of Waterloo and Waterloo Lutheran University during the one-week tour early in November.

Dr. Joseph R. Royce, Director of the Centre for Advanced Study in Theoretical Psychology was on a two-week lecture tour in October. He lectured and conducted seminars at such universities as McGill, Windsor, and Western Michigan; his talks were based primarily upon his books, *The Encapsulated Man* and *Psychology and the Symbol*, and the work of the Centre.

STUDY LEAVES

Gerald McCaughey, Associate Professor of English, has been granted a year's leave of absence to accept the appointment of Distinguished Visiting Professor at San Fernando Valley State College. Shortly before leaving for California, he signed a contract with the University of Toronto Press for a forthcoming book, sponsored by The University of Alberta's Publication Committee, entitled, *Of Several Branches: Studies from the Humanities Association Bulletin*.

Professor John G. Packer, Associate Professor of Botany at The University of Alberta and now on sabbatical leave in Colorado, has been appointed Visiting Associate Professor of Biology at the University of Colorado.

Professor Andrew R. Thompson of the Faculty of Law has returned to The University of Alberta following his year abroad as Visiting Professor of Law at the University of Auckland, New Zealand. In August, Professor Thompson delivered the major address at a special seminar at the Law School of the University of Melbourne. His paper, "Australian Petroleum Legisla-

tion and the Canadian Experience," will be published in the *University of Melbourne Law Review*.

SPECIAL APPOINTMENTS

L. C. Green, Professor of Political Science, has been appointed to the Committee on Regional and Local Activities by the American Society of International Law, Washington, D.C.

Dr. I. G. Dalla Lana, Associate Professor of Chemical and Petroleum Engineering, was elected Secretary of the Canadian Society for Chemical Engineering at the national meeting in Niagara Falls, October 15 to 18.

Wing Commander Arthur Crighton has been appointed Commanding Officer of 107 University Squadron, Royal Canadian Air Force, replacing Wing Commander B. E. Riedel, C.D. Dr. Crighton is Associate Professor of Music; Dr. Riedel, formerly Executive Assistant to the President, is now Dean of Pharmacy at the University of British Columbia.

Miss Sandra Munn, Assistant Professor of Music, adjudicated the first music festival to be held in the Northwest Territories at Yellowknife on October 27 and 28.

Visitors

GUEST PARTICIPANTS IN 'PARADISE LOST' CONFERENCE

The English Department's tercentenary celebrations in honor of Milton's *Paradise Lost*, in October, brought a number of visitors to the Campus. Those who addressed the conference were: John Bryce, Professor of Renaissance Literature at the University of Glasgow; John Steadman, Senior Research Associate in English Literature at Huntington Library in San Marino, California; Max Patrick, Professor of English at New York University Graduate School; and Ernest Sirlick, Dean of Graduate Studies at the University of Toronto.

RECENT GUEST LECTURERS

Professor Peter Selz, Professor of the History of Art and Director of the Art Museum at the University of California, Berkeley, was guest lecturer here on Tuesday, November 7, on the topic "German Expressionism."

British music critic Arthur Jacobs gave two public lectures here last month as guest of the Department of Music. His topic on October 26 was "The Music Critic as Middle Man," and on October 27, "Opera Since Puccini."

Professor E. C. Badian of the University of Leeds, a leading authority on the Hellenistic World and the Roman Republic, lectured on the topic "Alexander the Great" on October 25. Dr. Badian visited Edmonton as part of a lecture tour of the Western

Provinces; he is Visiting Professor at the State University of New York, Buffalo.

Dr. Desmond Pacey, Dean of Graduate Studies and Head of the Department of English at the University of New Brunswick, delivered a lecture here October 19 entitled "Hundred Year Harvest: A Century of Canadian Literature," and on October 20 conducted a seminar on, "The Phenomenon of Leonard Cohen."

Professor David P. Ausubel of the Ontario Institute for Studies in Education spoke on "Cognitive and Motivational Factors in Cultural Deprivation."

In recent weeks the Mathematics Department has hosted a number of scholars who have addressed the Mathematics Colloquium. They include Professors Hans Sagan of North Carolina State University, Aubert Daigneault of the University of Montreal, A. Ostrowski of the University of Waterloo, and C. Kreweras of Laval University.

Professor Adraan Moens, of the Department of Agricultural Engineering, State Agricultural University, Wageningen, The Netherlands, visited The University of Alberta Departments of Agricultural Engineering and Agricultural Economics on October 31 and November 1.

Dr. G. Harold Silvius, Professor and Chairman of the Department of Industrial Education at Wayne State University, Detroit, visited the Department of Industrial and Vocational Education here October 25 and 26.

Canadian singer and vocal teacher Bernard Diamant was on campus for a series of workshop sessions in the Department of Music October 4 to 7. On October 8 he gave a public recital in Convocation Hall with pianist Sandra Munn, Assistant Professor of Music.

Corbett plaque unveiled

A plaque commemorating the late Edward Annand Corbett, first Director of The University of Alberta's Department of Extension and founder of the Banff School of Fine Arts, was unveiled on November 9 at a meeting of the University Senate in E. A. Corbett Hall.

The author of several books, Dr. Corbett died in 1965 and is remembered with pride as Edmonton's "Father of Extension".

The plaque was designed by D. D. Barry, Assistant Professor of Art in the Department of Extension.

New research publication announced

The first issue of *Canadian Research and Development*, a new bi-monthly publication, will appear in January, according to the Maclean-Hunter Publishing Company, Lim-



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ited, of Toronto, Canada's largest publisher of trade and consumer magazines.

The magazine will be directed to what Maclean-Hunter calls "decision-makers in Canada's scientific and technological community." An initial circulation of 8,000 is expected.

Editor is Hugh C. McIntyre, who says that "government and private research support in Canada is accelerating at the rate of 20 per cent per year . . . and will pass the billion-dollar mark by 1970."

Contract awarded for temporary facilities

Universal Construction Co. Ltd. has been awarded the contract for construction of Temporary Facilities for Bacteriology and Pathology in the Health Science Centre.

Universal Construcion submitted the low bid of \$288,882.00. Six other bids were received.

The building will be constructed south of the Research Council of Alberta and will provide 18,000 square feet of classroom and laboratory space.

Set of Talmud presented

An eighteen-volume set of the Babylonian Talmud, a gift of the Hadassah-Wizo Organization of Canada, was accepted on behalf of the University by Dr. W. H. Johns, the President, at a recent ceremony.

The organization, to mark Centennial year, is presenting sets to thirty universities across Canada. Dr. Johns also received a personal gift from the Edmonton branch of a book by Israeli soldier-scholar Yigael Yadin dealing with his archaeological excavations on the site of the ancient fortress Masada.

The ceremony followed a reception at the home of Mr. and Mrs. Louis Rudolph attended by some twenty representatives of the University and their wives.

Teacher training for special education expanded

New emphasis on the training of teachers for exceptional children is being given this year by The University of Alberta's Faculty of Education which is, for the first time, directing courses in this area to undergraduates.

Such courses previously were confined primarily to graduate students, but because of the pressing need for special education teachers, interested undergraduates are being encouraged to sample at least four such specialized courses.

Along with the courses, field work will be instituted in classrooms of mentally retarded and emotionally disturbed children where undergraduates will get field experience under the supervision of University and school personnel. Field work in future



"I suppose this makes me the honorary father and father-in-law of those who live here, and as nature takes its course, soon honorary grandfather and grandfather-in-law as well," said the Right Honourable Roland Michener, Governor General of Canada and an alumnus of The University of Alberta. Then, with the help of his wife and Dr. Walter H. Johns, he cut a ribbon in front of Vanier House and declared Michener Park, the University's new housing development for married students, open. The ceremonies were held Monday, November 6; the booklet prepared for the occasion is enclosed with this issue of FOLIO.

years is also planned for other areas of special education, including hard-of-hearing, neurologically impaired, and gifted children.

While the program is aimed mainly at undergraduates who will be teaching exceptional children, it is also directed at the regular teacher whose classroom undoubtedly will contain some children with special learning problems.

Students in the new program will be working with the Centre for the Study of Mental Retardation at the University, which is under the directorship of Professor Donald Cameron.

The graduate program in the field of exceptional education has also been expanded. To meet new development and teaching needs, Dr. Juanita Chambers, formerly

Consultant Clinician at the Montreal Children's Hospital, has been appointed to the staff as Associate Professor. Dr. Ernest Stickel, Associate Professor, and Lillian Whyte, formerly of St. Francis Xavier University, Assistant Professor.

Dr. Chambers is a graduate of the University of Montreal and a specialist in the psychology and education of emotionally and socially disturbed children. Miss Whyte, who is presently working on her Ph.D. from Columbia University, is specializing in the psychology and teaching of the mentally retarded. Dr. Sickel, a graduate of Western Reserve University, Cleveland, in clinical psychology, has been director of a Washington, D.C., research project working with the emotionally disturbed adolescent.

The sanctuaries of Asklepios

Professor C. W. J. Eliot of the University of British Columbia Classics Department will deliver an illustrated address on "Sanctuaries of Asklepios" on Friday, November 17, at 8:15 p.m. in lecture room LB 2, Henry Marshall Tory Building.

Asklepios was the Greek god of medicine, and the "sanctuaries" were the hospitals of the ancient world.

Professor Eliot, for many years a member of the American School of Classical Studies at Athens, has dug in Greece and has published several books on Greek archaeology and ancient history. He is touring western Canadian universities under the auspices of the Classical Association of Canada.

"The Barber of Seville" coming

Rossini's comic opera, "The Barber of Seville," will be presented in English November 24 and 25 at the Jubilee Auditorium. Among the cast will be artists from the Canadian Opera Company, the Metropolitan Opera Company, and London's Covent Garden. A full-scale performance for students will be staged on November 22. Tickets for the regular performance, priced from \$2.00 to \$6.00 may be obtained from Heintzman Co. Ltd., 10139 Jasper Avenue.

Awards

Because of the limited time generally available to reply to the notices published here, and the nuisance involved in writing for additional details, FOLIO will attempt to publish in full the more important notices received. The original announcements may be examined at the Public Relations Office, 11224, 87 Avenue.

STUDY VISITS TO BRITAIN

The British Council has indicated its willingness to assist with study visits to Britain undertaken by Canadian university staff, research workers, and those engaged professionally in fine arts, music, drama, etc. This help can consist of suggestions of people and places to visit or the detailed preparation of a program.

Programs can be arranged for visitors whether or not they receive financial aid from the Council. Some funds are available for the payment of maintenance, fees and travel in Britain; transatlantic fares are not included. These British Council grants may be held in conjunction with other grants, e.g. for transatlantic travel, but not with other grants intended to cover the same expenses.

These study visits are divided into two categories:

(1) *Visitors*: Scholars carrying out a program concerned with their professional interests. Programs are normally from two to six weeks in duration.

(2) *Bursars*: Scholars carrying out a specific piece of research, advanced work or training, in any field of study (including the fine arts, music, drama, etc.) and who are normally attached to one institution or enrolled on a course. Bursaries are normally awarded for not less than two and, in Canada, for not more than three or four months.

Forms may be obtained from The British Council, British High Commission, 80 Elgin Street, Ottawa 4, Ontario.

NATO VISITING PROFESSORSHIP PROGRAM

The NATO Visiting Professorship Program for 1968-69 has been announced for the Department of External Affairs by the Association of Universities and Colleges of Canada.

Under the Program, Italy will invite one professor from Canada and Canada will invite a professor from Norway and Turkey. These professors will be asked to give lecture courses or undertake seminars or tutorial work in fields of study of direct interest to NATO.

The purpose of the program is to reveal the common tradition and historical experience of the North Atlantic area, and to give insight into the present needs and future development of the North Atlantic community.

The final selection of visiting professors will be made by NATO authorities. Suggestions regarding possible visiting professors from Norway or Turkey or scholars who might wish to teach in Italy may be submitted to the President's Office.

COMMONWEALTH UNIVERSITY INTERCHANGE SCHEME

Applications are invited for travel grants under the Commonwealth University Interchange Scheme, sponsored by the British Council. The purpose of the grants is to facilitate visits between universities in different parts of the Commonwealth. They are available for award to persons in the following three categories.

Category A: University teachers or officers on recognized study leave will be awarded the majority of the grants, with preference given to those of at least five years standing.

Category B: Grants are available to permit distinguished university scholars to visit other universities by invitation.

Category C: A limited number of grants are available to post-graduate research scholars to enable them to work at a university in another Commonwealth country but who require additional assistance to meet the cost of travel. These grants may also be available to faculty members ineligible under Category A.

The funds for the Interchange Scheme are derived from contributions made on behalf of the United Kingdom, Australia, and Hong Kong. A grant may be made only if the visitor's own university or the university at which he proposes to work is in one of these countries.

Applications for grants are to be directed to the British Council through the office of the President of the University. Applications must reach London by December 31, 1967 for Categories A and B, by March 31, 1968 for Category C.

CAMBRIDGE FELLOWSHIP

St. John's College, Cambridge, invites applications for its Commonwealth Fellowship for 1968-69. The Fellowship is intended to afford a scholar from an overseas member-state of the Commonwealth, on leave of absence from his university, the opportunity to pursue his own study and research as a member of a Collegiate society and to make contact with scholars in Great Britain. It is intended for scholars holding academic positions and not for men still working for post-graduate degrees.

The Fellowship is for a one-year term and is valued at £300 per year, plus rooms in the College free of rent, plus all other rights and privileges of a resident Fellow.

Application should be made to the Master, St. John's College, Cambridge, and must reach him prior to April 15, 1968.

CANADA COUNCIL GRANTS

Canada Council Grants are available to Canadian citizens or persons admitted to Canada for permanent residence (that is, those who have landed immigrant status). Correspondence should be directed to The Canada Council, 140 Wellington Street, Ottawa 4, Ontario.

Aid to the Humanities and to the Social Sciences

The Council offers three varieties of fellowships in Humanities or Social Sciences.

Doctoral Fellowships, open to persons proceeding to a doctoral degree or the equivalent, are valued as follows: up to \$3500 for students and \$4500 for teachers in Canadian universities who have no more than two years remaining to their university residence requirement; up to \$4500 for students and \$5500 for teachers in Canadian universities who have completed their residence requirements. An additional \$1000 may be granted to a limited number of top candidates. The fellowship is tenable in Canada or elsewhere for one year or less, and is renewable upon request for the last year of residence and up to two post-residence years devoted to completion of the doctoral program. Closing date for application is December 15, 1967.

Leave Fellowships are open to members of staff of Canadian universities who are engaged in independent research or some other form of creative scholarship while on leave of absence on partial or no salary. The fellowship is worth up to \$7000 for scholars of associate professor rank or above, or up to \$5000 for those below this rank. It is tenable for one year or less in Canada or abroad.

Other grants are available for research, for the establishment and maintenance of standards of learned journals, for assistance in publishing scholarly manuscripts, and for travel to meetings, conferences and seminars in the fields of Social Sciences or the Humanities, such as the Canadian Learned Societies annual meetings. Funds are also provided to assist in bringing visiting professors to faculties of Canadian universities and to assist in building research collections in libraries.

Aid to Artists

Two hundred forty bursaries, worth up to \$3500 plus travel allowances, are available for professional artists at an early stage in their career. Length and place of tenure is identical to that for awards; bursaries may, however, be renewed. Closing date for applications is December 1, 1967.

Short term grants, tenable for three months or less and not immediately renewable, are available for established artists (up to \$1350) and new artists (up to \$750). Individual artists are eligible for travel grants to enable them to attend occasions important to their careers. As well, funds for materials may be granted in cases of demonstrated need for small sums of money to provide special materials essential to the artist's work and for projects of an experimental nature.

Artists requiring assistance to complete a doctoral program in fine arts should apply to the Doctoral Fellowship competition described above.

Personal notices

Staff members may forward notices to reach the Editor two weeks prior to publication. They must be typed, and not exceed 35 words (including heading). Advertisements received will be published at the Editor's discretion.

WANTED TO SUBLET — Sessional lecturer wishes to sublet fully furnished apartment or home near Education Building for Second Term, January to May. Bess Weir, Room 231, Education Building, local 3658.

FOR SALE—Polar bear skin rug, needs new backing and edging. \$65.00. Local 3449 or 439-8354.

FOR SALE—Vacant lot on Sandy Lake, west of St. Albert. Area .43 acres. \$400. Local 3449 or 439-8354.

FOR SALE—Belgravia. 6-room bungalow. Extra two bedrooms, bath, rumpus room in basement. Heated double garage. Trees! Occupancy December 1 or earlier. 7823-119 Street. Call 433-3631 for appointment.

HOUSE FOR SALE—Near University. Three bedroom bungalow. Large living room, dining room. Two extra bedrooms, rumpus room, bathroom in basement. Beautiful Belgravia location. \$29,800. Phone 433-3631 for appointment.

FOR SALE—Electric organ. Wurlitzer Model 4100A. Beautiful tone. Cherry wood traditional. Almost new. Call Mrs. Anderson, 434-4460.

A FOLIO Supplement
November 16, 1967

"In 1962 our total registration was 7,417 . . . we expect to reach the predicted 21,800 by 1972.

This is merely five years hence. Our building program is not going ahead fast enough . . . to meet the demands that these students will impose."

Report to Convocation
by Walter H. Johns

The *Report to Convocation* at The University of Alberta's Fall Convocation, November 4, 1967, was given by Dr. Walter H. Johns, President of the University.

He said:

Eminent Chancellor—The re-organized administrative structure of the University is now well into its second year of operation. With each crowded day that passes, the value of this re-organization becomes more evident in the struggle to keep pace with mounting enrolment and growing operational complexity. We must anticipate, however, that even this 'new look' will be taxed to the limits, and beyond, in the years ahead.

The University has recently appointed two new Vice-Presidents: Dr. D. G. Tyndall in control of Finance and Administration and Dr. W. H. Worth, in charge of Campus Planning and Development. These appointments reflect the urgent need to decentralize the administrative burden and delegate broad areas of responsibility in a University where one man can no longer maintain a grasp of all the masses of detail involved in its immense operations. It also reflects the growing faith in the maturity of all levels of University government which makes it possible to delegate authority in ever greater measure as a matter of general policy.

Evidence of this growth in maturity and responsibility may be seen in every faculty and department. To say something about all those members of the staff who contribute to the excellence for which this University is increasingly recognized is impossible in the time at my disposal. Our faculty come from universities in all parts of the world and many of them are out-

standing leaders in their particular fields. For example, our Dean of Medicine, Dr. W. C. MacKenzie, has recently completed a year's service as President of the American College of Surgeons, and has also been made Honorary Physician to Her Majesty the Queen. Dr. C. F. Bentley, our Dean of Agriculture, has recently been chosen to head a body of Canadian agriculturists and food specialists to prepare a study on India; Professor Ray Lemieux of the Department of Chemistry was made a Fellow of the Royal Society, adding to his many other distinctions; and Dr. H. E. Gunning, Head of the Department of Chemistry, has been awarded the Medal of the Chemical Institute of Canada. Similar awards have been given to many other members of our Faculty.

Teaching and research can only flourish in an environment of freedom. Free enquiry, as the fundamental of scholarship, has long been recognized and generally respected. Yet there is continuing pressure, frontal and indirect, to abridge this freedom. Protecting and defending it is not an easy task, since it will inevitably be used to challenge the status quo and may be subject to abuse. Only too frequently this University has failed in its public relations duty of so informing the people of the province about its aims and activities that they can see how vital its health and growth are to them. In an effort to rectify this failure in communications, a much expanded program of public relations has now been undertaken at the instance of the Senate and the Board of Governors.

The Association of Universities and Colleges of Canada, of which I have, this week, completed my term of office as President, does not 'rate' universities, and perhaps my own rating might be suspect under the

circumstances, but I feel it fair to say that The University of Alberta ranks among the top five in Canada, along with Toronto, McGill, British Columbia, and Laval.

Our Faculty of Graduate Studies is among the best in Canada. Our faculties of Agriculture, Business Administration and Commerce, Dentistry, Education, Engineering, Medicine, Physical Education, Pharmacy, and Science are also certainly among the best in the country. Our faculties of Arts and Law have many outstanding teachers and staff. Our departments of English, Classics, Fine Arts, History and Sociology are certainly excellent. Outstanding Science departments would definitely include Chemistry, which I believe to be the best in the country, Geology, Mathematics, and many others.

It requires a combination of high quality in faculty and adequate physical facilities to make it possible to accept and graduate those of our young people who have the ability and desire for higher education.

We are on the threshold of an era in university growth which will have profound effects on the total enrolments in future years. It is our fear that many capable students will be unable to enter university because of limitations in staff and facilities. The years ahead pose problems of truly critical proportions. The facts are simple; their impact is complex. Today's full-time college enrolment in Canada and the United States of over 4.5 million is expected to double within ten years and remain permanently at the higher level. This is no temporary 'post-war' bulge pouring into college gates. The enrolment at The University of Alberta has risen far beyond predictions made some ten years ago. Our Registrar, Mr. A. D. Cairns, has given me



some very recent figures which illustrate the 'explosive' development in the last few years.

Total full-time student enrolment stands today at 13,057, of which 11,520 are undergraduate students, and 1,537 graduate students. The total enrolment has been climbing steadily at a rate of nearly 11 per cent per year. According to present estimates, the space available for physical facilities on the Edmonton campus, including the newly-acquired areas in North Garneau, will permit a total registration of 21,800 students. In 1962 our total registration was 7,417 and at the present rate of growth we expect to reach the predicted 21,800 by 1972. This is merely five years hence. Our building program is not going ahead fast enough and will not be completed in time to meet the demands that these students will impose.

The faculties of Medicine, Dentistry, and Pharmacy have long been compelled to impose registration quotas simply because we do not have enough dentists' chairs, medical operating theatres, and other physical facilities to handle higher enrolments. The virtual certainty now exists that quotas may have to be imposed on such faculties as Arts, Science, Engineering, and Education, where no quotas have previously existed.

These are the rates of growth in our other faculties in one year, and how much the 1967-68 enrolment has increased over the 1966-67 figures:

Agriculture	14 per cent
Arts	16 per cent
Commerce	16 per cent
Education	7 per cent
Engineering	8 per cent
Household Economics (with expanded facilities)	37 per cent
Law	20 per cent
Nursing	30 per cent
Physical Education	15 per cent
Science	12 per cent

Our Faculty of Graduate Studies shows an increase of 17 per cent this year, and has nearly doubled over the past five years.

Our freshman class this year increased from a registration of 2,852 in 1966-67 to 3,011 this fall—an increase of 159 in total.

These heavy increases in enrolment over the past seven years place a heavy financial burden on our University. Increased operational costs will be met, in part, by tuition fees. But these amounts will be far short of the growing needs. As many of you may have heard through newspaper reports, the Universities in Alberta face a real 'financial crisis' in the years ahead. Add to this a very real teacher shortage and one cannot help but agree with the conclusions reached by the Research Division of the United States National Education Association in a study made in 1963, which stated, "The total number of persons with high-level skills and comprehensive preparation does not equal the present demand. Business, industry and government enjoy a favorable position. Universities and colleges find them-

selves more embarrassed day by day. Right now the total resources of the institutions of higher education are not equal to the total task which only they can perform. If they continue to be priced out of the market—as is now the case on many campuses—the tragic result is clear. In short, this means second-rate education for larger and larger numbers of our youth."

In recent years, very large sums of money have been made available by the people of Alberta through their government to attempt to develop their universities fast enough to keep Alberta in step with other advanced areas of the world. But the tax dollar appropriated to education is slowly being spread over greater areas of need, and the amount required to take care of the universities is increasingly difficult to find. In order to provide the youth of Alberta with the kind of higher education they will demand we will have also to depend on corporate benefactors within business and industry for help.

Our student living accommodation is far below our needs at present, even with the addition of the third residence tower adjacent to Lister Hall for next term, and the quarters for 300 married students and their families in Michener Park, at the south end of the University Farm, which will be officially opened by His Excellency the Governor General on Monday afternoon. This problem is aggravated by a growing city-wide traffic crisis.

Space for teaching and study is even more seriously lacking. The departments offering instruction in biological science, the physical sciences, the basic and clinical sciences in Medicine, the Faculty of Physical Education, the Department of Industrial and Vocational Education, and many others are so short of space right now that they must operate in quite unsatisfactory quarters with labs running late into the evening, and in some cases departments must either restrict their enrolment or sacrifice the quality of their instruction. A university cannot add 1,200 new students every year without adding very extensive teaching facilities as well in the form of offices for its instructors, classrooms, laboratories, library space, and study areas. In spite of what appears to be an impressive building program, the shortages are pressing, and the University is undertaking another in a series of space utilization studies to ensure that its facilities are used with all possible efficiency.

We are, however, making gains in our facilities and even more substantial gains are, we hope, in prospect. The Henry Marshall Tory Building for Social Sciences, the new Engineering Centre Phase I, the Printing Services Building, and the Students' Union Building, are all either occupied or nearing readiness for occupation. Construction is well underway on the Biological Sciences Building, and the removal of old houses for future expansion in the North Garneau area is progressing well. The

Clinical Sciences Building on the hospital campus is also well underway.

You may ask whether too much emphasis is being placed today on university education. I can assure you that this is not the case. There is scarcely a single profession in our society today that does not need far more graduates than we can produce. With the development of provision for universal medical care we can foresee a grave shortage of doctors, dentists, nurses, pharmacists, physical and occupational therapists, and laboratory technicians. The shortage of people with the necessary advanced qualifications to teach and do research in these areas will become increasingly acute.

A shortage of qualified primary and secondary school teachers is still with us, and we cannot relax our efforts to meet the need. In special areas such as technical and vocational education and education for the handicapped and the retarded, the shortages are tragically severe.

As the years pass we find that fewer of the early graduates remain as part of our University family. This year, we have suffered another bereavement, and I should like to pause for a moment in tribute to the late Judge L. Y. Cairns, a member of the first class of this University, who served as our Chancellor from 1958 to 1964 and whose passing on July 28 of this year we all mourn.

Eminent Chancellor, I am sure you would wish me to say how pleased and honored we are that Barbara Ward, Lady Jackson, has graced this Convocation with her presence. She already holds honorary degrees from other universities, far older and more distinguished than ours, and we are greatly indebted to her, not only for participating in the Centennial observances being held in our city, but for consenting to address Convocation this afternoon.

I should like to conclude my remarks today by offering my congratulations to the students of this University for the many notable accomplishments which have added to the stature of The University of Alberta. Among them are a successful Centennial project in Second Century Week, participation in worthwhile community activities such as the United Community Fund drive, and the completion of the much needed Students' Union Building, which the University could not have provided from its unaided resources. This magnificently conceived building will stand as a monument to tireless and visionary effort on the part of our students, an effort which augurs well for the future of our country.

You will see several hundred of these students march across the platform and I suggest that you observe them closely as they approach the Chancellor for their degrees. I am sure you will agree with me that they, together with our distinguished visitor who will receive an honorary degree today, deserve our congratulations and our thanks.